## **Amendments to the Abstract of the Disclosure:**

Please amend the Abstract as shown below and insert the clean copy attached to this Response:

There is provided a water electro system which permits easy recycling of recovered pure water. The A water electrolysis system including includes: an electrolysis unit having an electrolyte membrane 11 sandwiched by catalyst layers 12 and 13 and [[:]] a water electrolysis means 1 that brings out generating hydrogen from one catalyst layer and brings out a gas/liquid mixture of oxygen and pure water from the other catalyst layer by electrolyzing pure water; a gas/liquid separating means unit 2 that separates separating pure water 7 from the gas/liquid mixture; and a backflow means unit 8 that makes flowing the separated pure water 7 flow back to the water electrolysis means unit 1. The gas/liquid separating means unit 2 is arranged to be directly connected to a discharge opening 3 through which the gas/liquid mixture is brought out from the water electrolysis means unit 1 without intermediate piping, and the gas/liquid mixture flows back directly to the gas/liquid separating means unit 2 through the discharge opening 3. The water electrolysis system includes a A purifying means device 9 for purifying with the aid of using ion exchange resin can be provided to further purify the pure water made to flow back by means of the backflow means 8, and makes the purified pure water flow back to the water electrolysis means 1. The purifying means device 9 is arranged adjacently to can share a common wall with the water electrolysis means unit 1. The gas/liquid separating means 2 comprises an

**- 4 -** (10/644,966)

intake opening 4 for mint pure water. The gas/liquid separating means 2 comprises a filter 5 for separating oxygen and pure water from each other.

## ABSTRACT OF THE DISCLOSURE

A water electrolysis system including: an electrolysis unit having an electrolyte membrane 11 sandwiched by catalyst layers 12 and 13 and generating hydrogen from one catalyst layer and a gas/liquid mixture of oxygen and pure water from the other catalyst layer by electrolyzing pure water; a gas/liquid separating unit 2 separating pure water 7 from the gas/liquid mixture; and a backflow unit 8 flowing the separated pure water 7 back to the water electrolysis unit 1. The gas/liquid separating unit 2 is directly connected to a discharge opening 3 through which the gas/liquid mixture is brought out from the water electrolysis unit 1 without intermediate piping, and the gas/liquid mixture flows back directly to the gas/liquid separating unit 2 through the discharge opening 3. A purifying device 9 using ion exchange resin purifies the water. The purifying device 9 can share a common wall with the water electrolysis unit 1.